

# Charcoal from Coconut Shell- A Valuable Resource

## Coconut Shell Products, Coconut Shell Charcoal

**Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule, Working Capital Requirement, Plant Layout, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis**

# Introduction

Shell Charcoal is an important product obtained from coconut shell. Shell charcoal is used widely as domestic and industrial fuel. It is also used by blacksmiths and goldsmiths and in laundries. Shell Charcoal is also used to produce activated carbon. Activated Carbon produced from coconut shell has certain specific advantages as the raw material can adsorb certain molecular species. The shell charcoal is manufactured by burning shells of fully matured nuts in limited supply of air sufficient only for carbonisation, but not for complete destruction.

**There are many methods of coconut shell charcoal production, but the drum method and pit method are the most widespread. In general, shell charcoal is made by burning coconut shells in a limited supply of oxygen. It is important to know that oxygen could destroy shells if the air will not be limited. It should be used clean, fully dried and mature shells in order to get high quality charcoal. Coconut shell charcoal is found to be a suitable material in the development of golf courses, according to the Coconut Development Board sources here. In golf courses, a layer of coconut shell charcoal is laid to a certain depth along with sand and other biomass before grass is planted.**

**Coconut Shell Charcoal are highly acclaimed by the customers for their top notch quality and long shelf life. These have accurate composition and long shelf life. Moreover, these are processed in our sophisticated facility as per market demands and specifications ensuring the deliverance of flawless of Coconut Shell Charcoal.**

**One tonne of coconut shells is procured for Rs 4,000. Shell-based activated carbon is extensively used for refining and bleaching of vegetable oils and chemical solutions, water purification, recovery of solvents and gold. It is also used in gas masks and a wide range of filters.**

**Activated carbon is produced from coconut shell charcoal is used widely in the world market in many industrial applications such as air purification, gas, liquids and refined gold. Charcoal is also used in chemical mixing and preparation of pharmaceutical products, in preserving fruits and vegetables, and many other applications. In the past 05 years, total import demand for activated carbon from coconut shell charcoal rose 7.73 % / year and is expected to increase from 10-25 % / year from 2012 to 2018.**

There is a global demand of 1.2 lakh metric tonne of charcoal annually for making activated carbon. Like Sri Lanka, India should also put blanket ban on charcoal export to expand this lucrative industry.

The use of coconut shell charcoal briquette in barbecue and poultry raising is becoming popular. If this trend continues, the use of coconut shell charcoal could expand rapidly raising its demand significantly.

**Charcoal and purity of any substances has now become a basic requirement of any chemical substance. So many products obtained by processing are dirty in colour and having so many impurities. This problem can be easily solved by adsorption of which carbon has become one of the most generally used materials for the purpose, animal matter. The resulting amorphous products include charcoal coke and petroleum coke.**

**Granulated activated carbons are used for purification of gases or liquids and can be used in a vertical carbon packed column. It finds application in the preparations of pills and digestive tables. Its adsorptive properties are utilized in the treatment of ailments of the stomach due to hyperacidity.**

**Due to the expansion of pharmaceutical and vegetable oil industry the demand of activated carbon is expected to rise sharply in the coming years. Apart from demand in Indian market, there is also huge demand of activated carbon in foreign potential for the high quality activated carbon. So the unit has very good scope.**



# Reasons for buying the report:

- **This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product**
- **This report provides vital information on the product like it's characteristics and segmentation**
- **This report helps you market and place the product correctly by identifying the target customer group of the product**

- **This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials**
- **The report provides a glimpse of government regulations applicable on the industry**
- **The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions**

# Our Approach:

- **Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.**
- **The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players**
- **We use reliable sources of information and databases. And information from such sources is processed by us and included in the report**

## Scope of the Report

The report titled “Market Survey cum Detailed Techno Economic Feasibility Report on Charcoal from Coconut Shell” provides an insight into the Coconut Shell Charcoal market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Coconut Shell Charcoal project. The report assesses the market sizing and growth of the Indian Coconut Shell Charcoal Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- **Good Present/Future Demand**
- **Export-Import Market Potential**
- **Raw Material & Manpower Availability**
- **Project Costs and Payback Period**

**We at NPCCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in the Coconut Shell Charcoal sector in India along with its business prospects. Through this report we have identified Charcoal from Coconut Shell project as a lucrative investment avenue.**

# Project at a Glance

<b>Capacity</b>	-	<b>5 Tons/day</b>
<b>Plant &amp; Machinery</b>	-	<b>21 Lakh</b>
<b>Total Capital Investments</b>	-	<b>107 Lakh</b>
<b>Rate of Return</b>	-	<b>45%</b>
<b>Break Even Point</b>	-	<b>45%</b>



# Major Queries/Questions Answered in the Report?

- 1. What is Coconut Shell Charcoal industry ?**
- 2. How has the Coconut Shell Charcoal industry performed so far and how will it perform in the coming years ?**
- 3. What is the Project Feasibility of a Coconut Shell Charcoal Plant ?**
- 4. What are the requirements of Working Capital for setting up a Coconut Shell Charcoal plant ?**

- 5. What is the structure of the Coconut Shell Charcoal Business and who are the key/major players ?**
- 6. What is the total project cost for setting up Coconut Shell Charcoal plant ?**
- 7. What are the operating costs for setting up a Coconut Shell Charcoal plant ?**
- 8. What are the machinery and equipment requirements for setting up a Coconut Shell Charcoal plant ?**



- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up a Coconut Shell Charcoal plant ?**
- 10. What are the requirements of raw material for setting up a Coconut Shell Charcoal plant ?**
- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up a Coconut Shell Charcoal plant ?**
- 12. What is the Manufacturing Process and Formulations of a Coconut Shell Charcoal plant ?**

- 13. What is the total size of land required for setting up a Coconut Shell Charcoal plant ?**
- 14. What will be the income and expenditures for a Coconut Shell Charcoal plant ?**
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**20. What is the time required to break-even?**

**21. What is the Break-Even Analysis of a Coconut Shell Charcoal plant?**

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**An ISO 9001:2008 Company**



## Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



## What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Technology Books and Directory*
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- *Turnkey Project Consultancy/Solutions*
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## How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*



# Our Approach

**Requirement collection**

**Thorough analysis of the project**

**Economic feasibility study of the Project**

**Market potential survey/research**

**Report Compilation**



# Who do we serve?

- *Public-sector Companies*
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- *Bio-fertilizers And Biotechnology*
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- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
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- *Organic Farming, Neem Products Etc.*



- *Paints, Pigments, Varnish & Lacquer*
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- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
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- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
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- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
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